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Public Comments Processing
U.S. Fish and Wildlife Service, MS: PRB/3W
5275 Leesburg Pike
Falls Church, VA 22041-3803

Re: FWS-R2-ES-2022-0162
Endangered and Threatened Wildlife and Plants; Endangered Species Status for the
Dunes Sagebrush Lizard, 88 Fed. Reg. 42,661 (July 3, 2023)

Dear Director Williams,

The Permian Basin Petroleum Association (“PBPA”), the New Mexico Oil and Gas Association (“NMOGA”) and our collective member companies (referred to herein as the “Associations”) provide the following response to the July 3, 2023 proposed rule and request for comment from the U.S. Fish and Wildlife Service (USFWS or Service) to list the dunes sagebrush lizard (DSL) as endangered under the Endangered Species Act of 1973, as amended (ESA). 88 Fed. Reg. 42,661 (July 3, 2023) (“Proposed Rule”).

The PBPA is the largest regional oil and gas association in the United States. Since 1961, the PBPA has been the voice of the Permian Basin oil and gas industry. The PBPA’s mission is to promote the safe and responsible development of our oil and gas resources while providing legislative, regulatory, and educational support services for the petroleum industry. The PBPA membership includes the smallest exploration and services companies as well as some of the largest companies with world-wide operations. The Permian Basin is the largest inland oil and gas reservoir and the most prolific oil and gas producing region in the world.

NMOGA is a coalition of oil and natural gas companies, individuals, and stakeholders dedicated to promoting the safe and environmentally responsible development of oil and natural gas resources in New Mexico. Representing over 1,000 members, NMOGA works with elected officials, community leaders, industry experts, and the general public to advocate for responsible oil and natural gas policies and increase public understanding of industry operations and contributions to the state.

Executive Summary

➤ The Service arbitrarily determined that the DSL is in danger of extinction throughout all of its range. The Service mischaracterizes existing data in an attempt to support its unfounded hypothesis that the DSL is in danger of extinction with respect to New Mexico. Moreover, this conclusion is inconsistent with the Service’s 2012 decision not to list the DSL. With respect to Texas, the Service improperly disregards the Candidate Conservation Agreement with Assurances developed in 2020 for the DSL (“2020 CCAA”). Most significant, the Service ignores pending enrollments in this CCAA that will cover approximately 150,000 acres.

Moreover, the Service failed to evaluate the 2020 CCAA under its Policy for Evaluation of Conservation Efforts When Making Listing Decisions, 68 Fed. Reg. 15,100 (Mar. 28, 2003) (“PECE Policy”). In light of conservation efforts throughout the DSL’s range, the Service has no basis to conclude the species is in danger of extinction and its decision to do so is arbitrary and capricious.

➤ The Proposed Rule is fundamentally flawed because the Service overstates potential threats to the DSL. The Service’s projection of future oil and gas development in DSL range ignores existing conservation measures in New Mexico, most significant the avoidance of DSL habitat, and in Texas. The Service also improperly relies on well density impacts to conclude that oil and natural gas production threatens the DSL across its range.

➤ The Service arbitrarily concluded that the DSL is “functionally extinct” across portions of its range. The Service has no credible scientific basis for this conclusion.

➤ The Service arbitrarily discounts the value of habitat in “moderate” condition and lacks any credible scientific basis for finding that habitat in moderate and high condition will degrade in the future.

➤ The Service must comply with its own policy and disclose the specific activities that would constitute a violation of Section 9 of the ESA.

I. The Service Arbitrarily Determined that the DSL is in Danger of Extinction Throughout All of Its Range.

The ESA defines an “endangered species” as “any species which is in danger of extinction throughout all or a significant portion of its range[.]” 16 U.S.C. § 1532(6). With respect to the DSL, the Service concluded that it is in danger of extinction throughout “all” of its range. 88 Fed. Reg. at 42,673; *see also id.* at 42,674 (rejecting analysis of whether the DSL is in danger of extinction throughout a significant portion of its range). This conclusion is arbitrary for three reasons. First, the Service’s determination that the DSL is in danger of extinction in New Mexico lacks a factual basis. Second, this determination contradicts the Service’s finding in 2012 that the DSL was not in danger of extinction. Finally, the Service’s determination that the DSL is in danger of extinction throughout all of its range ignores conservation benefits of the 2020 CCAA in Texas.

A. The Service’s Determination that the DSL is in Danger of Extinction Throughout Its Range Lacks a Factual Basis.

The Service’s conclusion that the DSL is in danger of extinction throughout its range, including in New Mexico, lacks factual support. In the Proposed Rule, the Service found that “the most consequential to the long-term persistence of the dunes sagebrush lizard are habitat loss, modification, and fragmentation due to the industrial extraction of oil, gas, and frac sand[.]” 88 Fed. Reg. at 42,673. Throughout the Proposed Rule, the Service repeatedly concluded that DSL habitat would continue to suffer loss, modification, and fragmentation throughout the DSL’s range as the result of oil and gas development and frac sand mining. *See id.* at 42,673 (observing that habitat in moderate condition “are expected to continue to be impacted by human

activity”). Moreover, the Service concluded that habitat in New Mexico would not improve. *See id.* (observing that “limited existing infrastructure will likely be removed from this landscape” and, therefore, “there is little possibility for conditions in . . . moderate condition units to improve”). But oil and gas development, and frac sand mining, does not cause habitat loss, modification, and fragmentation throughout all of the DSL’s range. Instead, voluntary conservation measures and federal land management measures protect nearly all DSL habitat in New Mexico and improve DSL habitat in New Mexico where possible.

DSL habitat is protected from habitat loss, modification, and fragmentation resulting from oil and gas development. In New Mexico, approximately 85 percent of the DSL range is enrolled in the Candidate Conservation Agreement (CCA) and Candidate Conservation Agreement with Assurances (CCAA) that benefits the DSL and lesser prairie-chicken (CCA/CCAA). 88 Fed. Reg. at 42,672. The CCA/CCAA prohibits new surface occupancy, seismic activity, and linear infrastructure within (a) areas designated as occupied or suitable unoccupied lizard dune complexes and (b) delineated shinnery oak corridors. *See CCA/CCAA* at 27. In 2012, the Service described this conservation measure as “the foundational conservation measure that provides the greatest benefit to the lizard.” USFWS, *PECE Evaluation for the New Mexico CCA/CCAA and Texas Conservation Plan*, at 12 (2012), attached as Exhibit A. This conservation measure ensures that no new DSL habitat loss, modification, or fragmentation will occur on lands enrolled in the CCA/CCAA.¹

Additionally, the CCA/CCAA requires remediation and reclamation of legacy oil and gas facilities, including roads and well pads, and thus addresses one of the Service’s primary bases for listing. The Service has recognized that this conservation is “instrumental” to restore connectivity within DSL habitat. USFWS, *PECE Evaluation for the New Mexico CCA/CCAA and Texas Conservation Plan*, at 13. Specifically, the Service has recognized that although “[w]e do not have the ability to create shinnery oak dune habitat . . . restoring connectivity between currently suitable shinnery oak dunes by removing unsuitable habitat is instrumental in restoring larger continuous habitat patches.” *Id.* To date, 154 roads and well pads have been reclaimed and reseeded under the CCA/CCAA. CEHMM, *Annual Report 2022: Candidate Conservation Agreements for the Lesser Prairie-Chicken and the Dunes Sagebrush Lizard in New Mexico 20* (“CEHMM 2022 Annual Report”). Remediation and reclamation of legacy facilities reduces existing habitat fragmentation and degradation caused by historic land use activities—and thus ameliorates one of the Service’s justifications for claiming the DSL is functionally extinct. Therefore, contrary to the Service’s conclusion, connectivity of DSL habitat in New Mexico is improving, rather than deteriorating, and any threat to the DSL from habitat fragmentation is waning.

Furthermore, 65 percent of occupied DSL habitat in New Mexico is on lands managed by the United States Bureau of Land Management (“BLM”). *See* 88 Fed. Reg. at 42,672 (stating

¹ The Service now concludes that oil and gas development threatens the DSL across its range, including in New Mexico, by relying on a spatially explicit model of future oil and gas development. 88 Fed. Reg. at 42,670; USFWS, *Species Status Assessment for the Dunes Sagebrush Lizard* 112 (2023) (“SSA”). This model, however, fails to account for the conservation measures in the CCA/CCAA and BLM’s RMPA for the reasons discussed in section III(A) of these comments.

that 35 percent of occupied DSL habitat in New Mexico is on privately owned and State-managed lands). This habitat is protected through BLM's 2008 Resource Management Plan Amendment ("RMPA") to protect special status species and BLM's policies to manage and protect special species management. See BLM Pecos District Office, *Special Status Species Record of Decision and Approved Resource Management Plan Amendment (2008)* ("RMPA"); BLM, *Threatened and Endangered Species Program's Strategic Plan for Special Status Species Conservation and Recovery (2022)*, attached as Exhibit B. Particularly, BLM's RMPA directs new development and infrastructure at least 200 meters outside of dunes. See BLM, *Special Status Species Record of Decision and Approved Resource Management Plan Amendment 13 (2008)*; 77 Fed. Reg. at 36,880.

Likewise, frac sand mining does not occur in DSL habitat in New Mexico. The Proposed Rule cites no examples of frac sand mining occurring in New Mexico. See 88 Fed. Reg. at 42,668. Moreover, frac sand mining is unlikely to occur in New Mexico in any significant magnitude, given the high amount of federally managed land and the large amount of land enrolled in the CCA/CCAA.

For these reasons, oil and gas development, and frac sand mining, does not cause DSL habitat loss, modification, and fragmentation in New Mexico. Furthermore, habitat is improving in New Mexico, rather than deteriorating. Therefore, the Service has no basis to conclude that the DSL is in danger of extinction throughout New Mexico.

B. The Service's Determination that the DSL is in Danger of Extinction in New Mexico is Inconsistent with the Service's 2012 Decision Not to List the DSL.

The Service's conclusion that the DSL is in danger of extinction in New Mexico contradicts the Service's findings in its decision not to list the DSL in 2012. An agency decision is arbitrary when the agency does not articulate "a rational connection between the facts found and the choice made." *Baltimore Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 105–06 (1983). Here, although the status of the species in New Mexico remains unchanged in New Mexico since 2012, the Service arbitrarily concluded that the DSL is in danger of extinction there.

In the Service's 2012 decision to withdraw its 2010 proposed rule to list the DSL, the Service repeatedly found that conservation agreements and BLM's RMPA eliminated threats to the DSL in New Mexico so that listing was no longer warranted. Particularly, the Service found:

Since the time of our proposed listing, there have been many efforts to develop conservation measures for the dunes sagebrush lizard in Texas, and substantial interest in the existing conservation plans in New Mexico. Several conservation plans, including the New Mexico Conservation Agreements, Texas Conservation Plan, and BLM's RMPA, put in place conservation efforts that have been implemented by the States, BLM, private landowners, and oil and gas companies, and have a high level of certainty of continuing to be implemented in the future and of being effective. **These efforts have reduced or eliminated threats to the dunes sagebrush lizard. . . .**

In New Mexico, conservation measures within the New Mexico Conservation Agreements limit development to areas outside of the dunes sagebrush lizard's shinnery oak dune habitat. In addition, the New Mexico Conservation Agreements and BLM's Restore New Mexico Program have conservation measures or mitigation measures that remove caliche roads and pads, along with other nonfunctioning oil and gas infrastructure. **This measure creates additional habitat and reduces fragmentation throughout the dunes sagebrush lizard range, enhancing dunes sagebrush lizard habitat conservation through avoidance.**

77 Fed. Reg. 36,872, 36,898 (June 19, 2012) (emphasis added). Similarly, the Service concluded that “the conservation efforts have reduced or eliminated current and future threats to the dunes sagebrush lizard to the point that the species no longer is in danger of extinction now or in the foreseeable future.” *Id.* at 36,899. Furthermore, the Service determined that “the New Mexico Conservation Agreements . . . will be effective to reduce the threat of habitat loss to the lizard.” *Id.* at 36,890. The Service repeatedly defended these conclusions in litigation challenging its 2012 decision not to list the DSL. *See Defenders of Wildlife v. Jewell*, 815 F.3d 1 (D.C. Cir. 2016); *Defenders of Wildlife v. Jewell*, 70 F. Supp. 3d 183 (D.D.C. 2014). These conclusions echo the Service's findings in its *PECE Evaluation for the New Mexico CCA/CCAA and Texas Conservation Plan* (2012). *See id.* at 21 (determining that conservation efforts in New Mexico “will be effective in reducing threats to the lizard” and, further, that such efforts “need not to be applied on every acre of suitable lizard habitat”); *see also id.* at 12–13.

These conclusions are consistent with the Service's 2008 decision to approve the CCA/CCAA. Then, the Service determined that the conservation measures in the CCA/CCAA, if implemented throughout the range, would reduce and possibly eliminate the need to list the DSL:

This CCA is designed to include conservation measures that reduce and/or eliminate threats, on Federal lands. If enough Participating Cooperators on non-Federal lands implement conservation measures through their participation in the CCAA, the likelihood that the species will be listed will be greatly reduced. The implementation of conservation measures through the CCA and CCAA combined make it much less likely that lessees and permittees will bear additional conservation burdens on Federal lands.

CCA/CCAA at 6.

The Service's 2012 and 2008 findings directly contradict its conclusion in the Proposed Rule that the DSL is in danger of extinction throughout all of its range, including New Mexico. In the Proposed Rule, the Service fails to identify any new or different circumstances that result in the DSL being in danger of extinction in New Mexico. Rather, the Service states that 85 percent of the DSL's range in New Mexico is enrolled in the CCA/CCAA—a higher amount than in 2012. *Compare* 88 Fed. Reg. at 42,672 (“The total area of habitat enrolled by industry, private landowners, New Mexico Department of Game and Fish, and New Mexico State Land Office currently covers around 85 percent of the range of the [DSL] within New Mexico.”) *with*

77 Fed. Reg. at 36,884 (“As of May 2012 in New Mexico, 83 percent of the [DSL’s] habitat was enrolled in the New Mexico Conservation Agreements.”).

Furthermore, these conservation agreements have ensured that DSL habitat in New Mexico has not been lost or degraded since the Service’s 2012 decision not to list the species and the Service has not demonstrated otherwise. Although the Service concludes that historical oil and gas development activities have caused the loss and degradation of DSL habitat, *see* 88 Fed. Reg. at 42,673, the Service cites no evidence that DSL habitat has been lost or degraded in New Mexico since 2012. Accordingly, the Service’s conclusion that the loss and degradation of DSL habitat threatens the species in New Mexico contradicts the Service’s 2012 finding that listing is not warranted.

Finally, the Service’s conclusion that existing oil and gas development threatens the species contradicts its 2012 decision not to list the species. In the Proposed Rule, the Service states that “[e]ven if there was no further expansion of the oil and gas or sand mining industries, the existing footprint of these operations will continue to negatively affect the [DSL] into the future.” 88 Fed. Reg. at 42,673. But, this finding contradicts the Service’s conclusion in 2012 that the CCA/CCAA will be effective in reducing threats to the DSL from oil and gas activities so that listing is not warranted. *See* 77 Fed. Reg. at 36,890; USFWS, *PECE Evaluation for the New Mexico CCA/CCAA and Texas Conservation Plan* at 21. Moreover, this finding is inconsistent with the Service’s conclusion in 2008 when approving the CCA/CCAA that application of conservation measures to existing development, together with elimination of future development in DSL habitat, will preclude the need to list the species. *See* CCA/CCAA at 6.

For these reasons, the Service’s determination that the DSL is in danger of extinction in New Mexico contradicts its conclusions to the contrary in 2012 and 2008. The Service must withdraw the Proposed Listing Rule.

C. The Service Ignores the Conservation Benefits of the 2020 Texas CCAA.

The Service arbitrarily attributes no conservation value or benefits to the 2020 CCAA, which covers oil and gas, sand mining, linear infrastructure (such as utilities and pipelines), wind, solar, local governments, and agriculture and ranching in Texas. *See* 88 Fed. Reg. at 42,672–73. The Service approved this CCAA and issued the associated enhancement of survival permit recently in 2021. *See id.* at 42,673; *see also* Application for an Enhancement of Survival Permit; Draft Candidate Conservation Agreement With Assurances for the Dunes Sagebrush Lizard (*Sceloporus arenicolus*); Andrews, Gaines, Crane, Ector, Ward, and Winkler Counties, Texas, 85 Fed. Reg. 74,370 (Nov. 20, 2020). In the Proposed Rule, however, the Service implied that the 2020 CCAA is ineffective. The Service stated that the permit administrator “is actively seeking participants to sign up under the 2020 CCAA” but “[t]o date, no certifications of inclusion have been issued, and thus no conservation actions have been implemented as part of this CCAA.” 88 Fed. Reg. at 42,673.

The Service’s assessment of the 2020 CCAA as ineffective is incorrect, arbitrary and capricious because it ignores pending enrollments. Furthermore, the Service failed to evaluate the 2020 CCAA under its PECE Policy. The Service’s dismissal of the 2020 CCAA as

ineffective discourages and undermines voluntary conservation efforts that will be more successful in conserving the DSL than a listing decision. For these reasons, the Service's determination that the DSL is in danger of extinction throughout its range is arbitrary. The Service must withdraw the Proposed Rule.

1. The Service Ignores 150,000 Acres of Pending Enrollments in the 2020 CCAA.

The Service's characterization of the 2020 CCAA as merely "seeking participants" fails to acknowledge, and to disclose to the public, the 2020 CCAA's actual status. The Associations understand that, currently, multiple companies are attempting to enroll approximately 150,000 acres in the 2020 CCAA. This pending enrollment area constitutes more than half of all DSL habitat in Texas. *See Canyon Environmental, LLC, Candidate Conservation Agreement with Assurances for the Dunes Sagebrush Lizard (Sceloporus arenicolus)* 87 (2021). The Associations understand, however, that the Service will not approve or acknowledge these enrollments. The Service cannot refuse to approve these enrollments and then characterize the 2020 CCAA as "seeking participants." The Service's refusal to process or acknowledge these enrollments misleads the public as to the actual status of the 2020 CCAA.

Once enrolled, participants will implement the robust conservation strategy outlined in the 2020 CCAA. *See id.* at 49–70. This conservation strategy will be implemented on a landscape scale to reclaim and restore DSL habitat impacted by surface disturbances and to conserve contiguous blocks of high priority areas of habitat to reduce habitat fragmentation and ensure maintenance of dispersal habitats across the landscape. *Id.* at 52. Moreover, participants in the CCAA will implement a suite of conservation measures that include avoidance of DSL habitat in areas of high and intermediate suitability, subject to limited exceptions and conditions. *See id.* at 52. Conservation measures also include minimization measures. *Id.* at 55. These conservation measures are subject to adaptive management. *Id.* The Service acts arbitrarily, and misleads the public, by failing to acknowledge or evaluate pending enrollments in the 2020 CCAA when assessing its conservation benefits.

2. The Service Must Evaluate the 2020 CCAA Under Its PECE Policy.

The Service must evaluate the 2020 CCAA under its PECE Policy. The PECE Policy requires the Service to "evaluate whether formalized conservation efforts contribute to making it unnecessary to list a species, or to list a species as threatened rather than endangered." 68 Fed. Reg. 15,100, 15,113 (Mar. 28, 2003). The PECE Policy "applies to those formalized conservation efforts that have not yet been implemented or have been implemented, but have not yet demonstrated whether they are effective at the time of a listing decision." *Id.*

The 2020 CCAA squarely falls within the PECE Policy's scope. The 2020 CCAA is a "formalized conservation effort[] that [has] not yet been implemented." 68 Fed. Reg. at 15,113. In the Proposed Rule, the Service expressly recognized that "no conservation actions have been implemented as part of [the 2020] CCAA." 88 Fed. Reg. at 42,673. Therefore, the Service must review this agreement under its PECE policy. *See Permian Basin Petroleum Ass'n v. Dep't of the Interior*, 127 F. Supp. 3d 700 (W.D. Tex. 2015). Should the Service finalize the Proposed Rule and list the DSL as endangered without evaluating the 2020 CCAA under its PECE Policy,

the failure to evaluate the 2020 CCAA would justify vacatur of the final listing determination. *See id.* at 722. Given that the Service determined as recently as 2021 that the 2020 CCAA would provide a “net conservation benefit” to the species by generally avoiding, minimizing, and offsetting impacts to the DSL and its habitat on private lands, the Service must conclude that the 2020 CCAA is reasonably certain to be effective. *See* 68 Fed. Reg. at 15,115. Moreover, given the sizable pending enrollments, the Service must also conclude that the 2020 CCAA is reasonably certain to be implemented. *See id.* at 15,114–15.

The Associations request the Service withdraw the Proposed Listing Rule until a PECE analysis of the 2020 CCAA is conducted and, once such analysis is conducted, the Associations request that the Service allow the public the opportunity to review and comment on its PECE analysis of the 2020 CCAA before the Service proposes another listing decision.

3. The Service’s Implicit Dismissal of the 2020 CCAA Discourages Voluntary Conservation.

The Service’s failure to acknowledge the conservation potential of the 2020 CCAA or to analyze it under the PECE Policy discourages voluntary conservation. The Service approved the 2020 CCAA just more than two years ago. In doing so, the Service concluded the 2020 CCAA would yield a net conservation benefit for the DSL—meaning that the 2020 CCAA would “improve the status of [the DSL] by removing or minimizing threats so that populations are stabilized, the number of individuals is increased, or habitat is improved.” 81 Fed. Reg. 95,164, 95,171(Dec. 27, 2016).

By disregarding pending enrollments in the 2020 CCAA, however, the Service discourages future voluntary conservation efforts. One goal of the Service’s Candidate Conservation Program “is to encourage the public to voluntarily develop and implement conservation plans for declining species prior to them being listed under the ESA.” 81 Fed. Reg. at 95,164. To further this goal, the Service must recognize both the permittee’s substantial time and resources to obtain approval of the 2020 CCAA and land users’ interest in committing resources to conserve the DSL.

The success of voluntary conservation efforts in New Mexico to protect the DSL reinforces the need for and role of these efforts. More than 1.9 million acres of surface estate, and 2.3 million acres of mineral estate, have been enrolled in the New Mexico CCA/CCAA to date—with a commitment to avoid occupied and suitable DSL habitat and delineated shinnery oak corridors. CEHMM 2022 Annual Report at 5. Additionally, these enrollments have funded more than \$15 million in projects to improve and restore habitat for both the DSL and lesser prairie-chicken. *See* CEHMM 2022 Annual Report at 84. Thus, voluntary conservation efforts in New Mexico have yielded more conservation benefits than can be achieved with a listing decision and the narrow prohibitions of Section 9 of the ESA. The Service must afford the 2020 CCAA the opportunity to yield comparable benefits in Texas. To do so, the Associations request the Service withdraw the Proposed Listing Rule.

II. The Service's Proposal to List the DSL Based Solely on Perceived Habitat Threats is Arbitrary.

The Service predicates its entire proposal to list the DSL as endangered on threats to DSL habitat. *See* 88 Fed. Reg. at 42,673. The Service concludes that existing land use activities “have so thoroughly degraded habitat across large portions (47 percent) of shinnery oak duneland habitat [that] much of it is no longer capable of supporting populations of the dunes sagebrush lizard.”² *Id.* The Service, however, bases this conclusion on aerial imagery and geospatial analysis that the Service has not ground-truthed. Furthermore, the Service arbitrarily ignores DSL population counts and trends. Finally, the Service rests the Proposed Rule on perceived habitat threats despite any maps identifying DSL occupied or suitable habitat.

First, the Service arbitrarily bases its findings of degraded DSL habitat almost entirely on geospatial analysis and aerial or satellite imagery the Service has not ground-truthed. *See* 88 Fed. Reg. at 42,669, 42,670; SSA at 4, 41–42, 94–105, 196. This information is not credible, particularly because the Service neglected to confirm its estimates through ground truthing. Lack of access is not an issue. In New Mexico, BLM manages 65 percent of occupied DSL habitat and 85 percent of the range is enrolled in the CCA/CCAA. Similarly, in Texas, Monahans Sandhills State Park is publicly accessible. The Service's decision to rely solely on unverified inferences of DSL habitat quality is arbitrary and capricious.

Second, the Service concludes that the DSL should be listed as endangered without any consideration of population counts or trends. Population estimates, however, contradict this conclusion. The best available science estimates a population size of more than one million DSLs.³ SSA at 38–39. Population estimates are increasing in two-thirds of surveyed areas in the Mescalero Sandhills, New Mexico. *See id.* at 37 (Fig. 2-10). Although DSL numbers have declined in certain areas, *see id.* at 38, the Service has not determined that these declines are occurring consistently throughout DSL populations and has not otherwise identified any range-wide population trends. *See id.* The Service cannot ignore DSL population numbers and instead declare the DSL in danger of extinction based solely on perceived habitat threats. Moreover, these population counts reflect that loss of habitat, particularly marginal or unoccupied habitat, does not necessarily equate to loss of DSL.

Finally, the Service cannot propose to list the DSL based only on perceived habitat threats without providing any reliable maps identifying where occupied or suitable habitat occurs or where habitat has been degraded. The Service has not provided or disclosed any maps identifying occupied or suitable DSL habitat in connection with the Proposed Rule. The SSA only includes a map of historical range of shinnery oak duneland and shrublands, *see* SSA at 19

² Conspicuously absent from the Proposed Rule, however, is the Service's acknowledgment of the United States' role in this degradation. In the SSA, the Service details how historic use of herbicides, namely tebuthiuron, caused present-day habitat degradation. SSA at 66, 90. The Service, however, fails to acknowledge that U.S. Department of the Interior and Department of Agriculture policies encouraged herbicide use in DSL habitat.

³ Although the Service concluded that the DSL is “functionally extinct” in the Southern Mescalero analysis units, nearly 350,000 individual DSL are estimated to occupy this area. SSA at 40.

(Fig. 2-3), a map of density estimates, *id.* at 39 (Fig. 2-11), and maps of the representation units and analysis units, *e.g.*, *id.* at 50 (Fig. 3-5). The omission of maps identifying current DSL occupied or suitable habitat fails to inform the public about the DSL's current habitat.⁴ Moreover, without such maps, the Service cannot justify its determination that degraded habitat threatens the DSL so that it is in danger of extinction throughout its range. The Service simply lacks any credible scientific basis to base the Proposed Rule on perceived threats to DSL habitat. The Service must withdraw the Proposed Rule.

III. The Proposed Rule Is Fundamentally Flawed Because the Service Overstates Potential Threats to the DSL.

The Service must withdraw the Proposed Rule because it overstates potential threats to the DSL. First, the Service's projection of future oil and gas development in DSL range ignores conservation measures in place in New Mexico. Second, the Service's analysis of threats improperly relies on well densities to conclude that oil and gas development threatens the DSL across its range. The Proposed Rule is therefore arbitrary and must be withdrawn.

A. The Service's Model of Future Oil and Gas Development in DSL Range Ignores Existing Conservation Measures in New Mexico.

The Service's model of future oil and gas development in DSL range does not account for the conservation measures provided by the New Mexico CCA/CCAA and the BLM RMPA. To project future oil and gas development, the Service utilized a "spatially explicit model" created by Pierre et al. (2020) "to project future landscape alternation associated with oil and gas development in the Permian Basin." 88 Fed. Reg. at 42,670; SSA at 112. The Service described this model as a "scientifically rigorous projection of future oil and gas development throughout the range of the dunes sagebrush lizard." 88 Fed. Reg. at 42,670; *accord* SSA at 112. Based on the modeled scenarios of future oil and gas development, the Service concluded that only 2 percent of the DSL range would have high resiliency in 2050. 88 Fed. Reg. at 42,670. This model, however, did not account for the conservation measures in the New Mexico CCA/CCAA or the management measures in BLM's RMPA that require avoidance of DSL habitat.

The Service incorrectly assumed that the model accounted for these mechanisms, stating "we considered the nature of the agreements and accounted for them in our projections of future habitat." 88 Fed. Reg. at 42,670. But the model only excluded from development protected areas, conservation easements, and BLM Areas of Critical Environmental Concern closed to future oil and gas leasing. *Id.* at 42,670; SSA at 112; Jon Paul Pierre et al., "Projected Landscape Impacts from Oil and Gas Development Scenarios in the Permian Basin, USA," *Environmental Management* (2020). The model did not account for the commitments in the CCA/CCAA and RMPA not to site infrastructure in occupied or suitable DSL dune complexes or within delineated shinnery oak corridors. The model also did not account for the BLM's RMPA management measures that direct new development at least 200 meters outside of dunes. These

⁴ To the extent the Service has provided habitat maps, these maps are not at scale, and do not provide enough detail, to offer the public an opportunity for meaningful review. *See, e.g.*, SSA at 96 (Fig. 5-2). Moreover, the Service should have provided access to the underlying model as part of the public review and comment process.

management measures have ensured that no new disturbance has occurred within 200 meters of dunes and in delineated shinnery oak corridors on enrolled lands since 2008, and these management measures ensure that no new disturbance will occur within 200 meters of dunes and in delineated shinnery oak corridors on enrolled lands in the future.

Given that most DSL habitat occurs in New Mexico, including the high-quality habitat in the North Mescalero analysis units, the model's failure to account for these conservation measures renders its predictions as to the future resiliency of DSL habitat to be wholly unreliable. The Service cannot characterize a "scientifically rigorous" model, *see* 88 Fed. Reg. at 42,670, and the Service cannot rely on its projections to forecast the resiliency of DSL habitat in New Mexico. Instead, the Service must recognize that, in New Mexico, existing conservation mechanisms protect DSL habitat and, therefore, that its resiliency will either improve or, at a minimum, remain constant.

B. The Service Improperly Relies on Well Density Impacts to Conclude that Oil and Natural Gas Development Threatens the DSL Across Its Range.

The Service overstates potential impacts from oil and gas development on DSL by citing impacts from well densities on the DSL. The Service observes that "[s]everal studies have demonstrated a negative relationship between oil well pad density and the number of dunes sagebrush lizards present at a site." 88 Fed. Reg. at 42,667 (citations omitted). The Service then cites a variety of well densities and the impacts on DSL abundance. *See id.* The Service particularly finds that areas within 13 well pads per square mile or greater have "considerably lower" abundance of DSL. *See id.* The Service fails to consider how modern energy production methods and technologies have resulted in a 70% reduction in surface disturbance when compared to historical practices.⁵ The Service cannot rely on historical data relating to surface disturbance and its impacts to the DSL to inform future impact analyses as this fails to recognize the shift change in deploying modern oil and gas production due to changes in technology. Further, the Service improperly relies on these historical impacts and well densities to infer that oil and gas development threatens the DSL into the foreseeable future, for three reasons.

First, the Service draws a weak connection between its cited well densities and existing oil and gas development in DSL habitat. For example, although the Service cites impacts to DSL from well densities of 13 well pads per square mile, the Service provides no analysis of the amount of DSL habitat with this density of well pads. The Service cannot assume, without any evidence, the extent to which these or other well densities occur throughout DSL range.

Second, the Service essentially "double counts" threats from existing well pads by considering them a threat to the DSL independent from existing habitat degradation. In fact, the Service's geospatial analysis already accounted for threats from existing well pads. *See* 88 Fed. Reg. at 42,669; SSA at 186–87. The Service's geospatial analysis estimated "the current quantity and quality of available habitat" and identified high, moderate, and low condition habitat throughout DSL range. 88 Fed. Reg. at 42,669. This analysis necessarily accounted for

⁵ *See* David H. Applegate & Nicholas Owens, *Oil and Gas Impacts on Wyoming's Sage Grouse: Summarizing the Past and Predicting the Foreseeable Future*, 8 HUMAN–WILDLIFE INTERACTIONS 284, 289–90 (2014), attached as Exhibit C.

impacts resulting from habitat fragmentation of any kind, including fragmentation resulting from well density. *See id.*; SSA at 186–87. Having assessed DSL habitat quality based on the degree of existing fragmentation from a variety of land uses and, having (incorrectly) concluded that such habitat quality threatens DSL, *see* 88 Fed. Reg. at 42,673, the Service cannot also cite well densities as an independent threat to the species. Accordingly, the Service overstates impacts to DSL and its habitat resulting from oil and gas development.

Finally, the Service has failed to properly account for or project the impact of ongoing well plugging and abandonment (P&A) programs, which are currently underway and which are anticipated to provide for significant deployment of P&A efforts tied to investments flowing from the Infrastructure and Jobs Act as well as significant state funds from New Mexico and Texas, and ongoing robust P&A efforts from operators throughout the DSL’s range. These P&A efforts yield significant value in reducing well counts, restoration of habitat, and increasing habitat connectivity—all to the benefit of the DSL’s current and future populations. For all of these reasons, the Service improperly relies on historical impacts and well densities to infer that oil and gas development threatens the DSL into the foreseeable future. No credible basis exists to conclude that oil and gas development threatens the DSL, and the Service’s contrary conclusion is arbitrary.

IV. The Service Arbitrarily Concluded that the DSL is “Functionally Extinct” Across Portions of Its Range.

In the Proposed Rule, the Service concluded “the dunes sagebrush lizard is ‘functionally extinct’ across 47 percent of its range.” 88 Fed. Reg. at 42,673. Moreover, the Service found that “[a]n entire lineage covering an ecologically separate portion of the range (Southern Mescalero) is functionally extinct (sic), which would reduce adaptive capacity and the ability of the species to respond to environmental change.” *Id.* This conclusion is arbitrary and capricious for three reasons.

First, the characterization of a species as “functionally extinct” is inherently arbitrary and capricious. Neither the ESA nor its implementing regulations define the term “functionally extinct.” *See* 16 U.S.C. §§ 1531–1544; 50 C.F.R. pt. 424. Similarly, the Service has not enacted any policy or guidance that advises how it should assess or determine whether a species is functionally extinct. Rather, the Service’s regulations use the term “extinct” in a binary fashion inconsistent with the concept of “functionally extinct.” They contemplate that a species either is extinct or is not. Specifically, the Service’s implementing regulations contemplate that the agency will delist a species when it is actually extinct. 43 C.F.R. § 424.111(1). The Service’s listing regulations do not afford the Service the discretion to characterize a species as “functionally extinct” for the purpose of determining whether to list the species.

Second, the Service’s own data contradict its conclusion that the DSL is functionally extinct in the Southern Mescalero analysis units. The Service itself acknowledges the potential for viable populations of the DSL to exist in the Southern Mescalero analysis units. The SSA characterizes the Southern Mescalero analysis units as “**unlikely** to support viable populations of the DSL”—but does not find that the units actually do not support such populations. SSA at 105 (emphasis added). In fact, the SSA expressly states “we acknowledge that even these Low condition areas likely support DSL populations.” *Id.* Moreover, the finding that the DSL is

“functionally extinct” in the Southern Mescalero analysis units ignores that these areas contain high densities of DSL. The Southern Mescalero 1 and Southern Mescalero 2 analysis units contain estimated populations of 317,513 and 32,765 DSL, respectively. *See id.* at 40. These populations translate to densities of 2.11 and 0.92 DSLs per acre. *Compare id. with id.* at 100. These densities are higher than the densities in the Northern Mescalero 2 and 4 analysis units, which both have “high” resiliency conditions. *Id.*; *see id.* at 9. The Service therefore lacks a factual basis to conclude that the DSL is functionally extinct in the Southern Mescalero analysis units.

Finally, the Service’s finding that the DSL is “functionally extinct” across 47 percent of its range is speculative. In another context, the Service has stated that “functional extinction” can occur when a species “is no longer viable and/or no reproduction will occur (*e.g.*, any remaining females cannot reproduce, only males remain, etc.)” Removal of 23 Extinct Species From the Lists of Endangered and Threatened Wildlife and Plants, 86 Fed. Reg. 54,298, 54,299 (Sept. 30, 2021). The Service, however, found that DSL populations may persist in degraded areas “over the next several decades.” 88 Fed. Reg. at 42,673. Further, the Service acknowledges that, during this time, some “potential” exists for DSL recolonization. *See id.* (“In highly degraded areas, remnant populations may persist over the next several decades, but as they become extirpated there is little potential for recolonization due to habitat fragmentation.”). Therefore, the Service only speculates that the DSL may become “functionally extinct” in the future and has no basis to conclude that the DSL presently is functionally extinct. Accordingly, the Service’s conclusion that the DSL is “functionally extinct” in portions of its range is arbitrary. As such, the Associations request that the Service withdraw the Proposed Listing Rule.

V. The Service Arbitrarily Discounts the Value of Habitat in “Moderate” Condition.

The Service arbitrarily discounts DSL habitat that is currently in “moderate” condition. The Service observes that 47 percent of the species’ range is in moderate condition, “meaning it contains sufficient amounts of minimally disturbed habitat to support populations of the dunes sagebrush lizard at this time.” 88 Fed. Reg. at 42,673. The Service, however, then discounts this habitat by finding that it will deteriorate in the future:

Even if there was no further expansion of the oil and gas or sand mining industries, the existing footprint of these operations will continue to negatively affect the dunes sagebrush lizard into the future. . . . Because shinnery-oak duneland habitat cannot currently be restored, and limited existing infrastructure will likely be removed from this landscape, there is little possibility for conditions in these moderate condition units to improve. Therefore, we conclude that habitat in these units will continue to deteriorate due to fragmentation, which will continue to isolate populations and result in a progressive decline in population abundance. Ultimately, the species will become extirpated in the areas currently classified as moderate condition, even without any expansion of current threats.

Id. The Service’s dismissal of habitat in moderate condition, and its conclusion that the species will become extirpated in these areas, is unsupported and therefore arbitrary for three reasons.

First, the Service arbitrarily concluded that the DSL will become extirpated in habitat in the 53 percent of habitat in moderate and high condition—despite reaching an opposite conclusion in 2012. Then, the Service determined that half of all DSL habitat is not fragmented and “provides adequate core habitat for the [DSL] to feed, breed, and shelter.” 77 Fed. Reg. at 36,889; *accord id.* at 36,881 (“more than 50 percent of the [DSL’s] range is not currently fragmented with oil and gas, and the lizard has adequate habitat to persist into the future”), 36,895 (“greater than 50 percent of the [DSL’s] habitat is unfragmented and provides large areas of core shinnery oak dunes”). Presumably, the more than 50 percent of DSL habitat that was unfragmented in 2012 is the same 53 percent of habitat that is currently in high and moderate condition. The Service, however, offers no explanation for its newfound conclusion that habitat in moderate condition does not offer “adequate core habitat” for the DSL. For this reason, the Service’s conclusion that the DSL will ultimately become extirpated in habitat in moderate condition lacks any credible scientific basis and is therefore arbitrary.

Second, the Service’s conclusion that habitat in high and moderate condition will deteriorate in the future departs from the agency’s findings in the SSA. The SSA characterizes habitat in “moderate condition” as “important for maintaining viability of the species.” SSA at 105. The Service also characterized 47 percent of DSL range as “minimally disturbed,” meaning that it has “[r]obust and interconnected populations, natural source-sink dynamics that support high resiliency.” *Id.* at 4, 92. The Service’s characterizations of habitat in moderate condition as important to the viability of the species, robust and interconnected populations, and dynamics that support “high resiliency” are inconsistent with the Service’s conclusion that the DSL will become extirpated in such habitat.

Finally, the Service incorrectly concluded that “there is little possibility for conditions in these moderate condition units to improve” because “limited existing infrastructure will likely be removed from this landscape.” 88 Fed. Reg. at 42,673. This conclusion ignores that the CCA/CCAA in New Mexico contemplates removal and reclamation of caliche roads and well pads. To date, 154 roads and well pads have been reclaimed, and 159.2 acres reseeded, under the CCA/CCAA. CEHMM 2022 Annual Report at 20. Thus, conditions in moderate DSL habitat may continue to improve under the CCA/CCAA, and the Service has not cited a credible basis to conclude otherwise. For all of these reasons, the Service inappropriately discounted the value of habitat in moderate condition and therefore must withdraw the Proposed Listing Rule.

VI. The Service Must Disclose the Specific Activities that Would Constitute a Violation of Section 9 of the ESA.

The Service has established a policy that, when listing a species, it will identify those activities that will or will not violate Section 9 of the ESA to the extent possible. Notice of Interagency Cooperative Policy for Endangered Species Act Section 9 Prohibitions, 59 Fed. Reg. 34,272 (July 1, 1994). With respect to the DSL, however, the Service states it is “unable” to do so. *See* 88 Fed. Reg. at 42,675.

The Service cannot claim, on one hand, that impacts from existing land uses (namely oil and gas development and frac sand mining) warrant listing the DSL and, on the other hand, claim it is unable to identify land use activities that will or will not violate Section 9 of the ESA. With a listing, the Service clearly intends to limit or prohibit future oil and gas development and frac

sand mining in DSL habitat (where voluntary conservation measures and the BLM RMPA do not already limit such development). *See* 88 Fed. Reg. at 42,673. Accordingly, the Service necessarily must have identified some of the activities that will or will not violate Section 9, even if the Service has not identified all of these activities. Conceivably, the Service has identified activities that will violate Section 9 but has not disclosed them because the Service recognizes that limiting these activities will significantly impact regional, state, and national economies and domestic energy supply. Unless and until the Service discloses activities that will or will not violate Section 9 of the ESA if it lists the DSL, the Service fails to comply with its own policy, and in so doing should withdraw the Proposed Listing Rule.

Conclusion

For all of these reasons, the Proposed Rule is fatally flawed. The Service must withdraw it. If you have questions about the information presented in these comments, please contact Ben Shepperd at (512) 297-2693.

Regards,



Ben Shepperd
PBPA President



Missi Currier
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Enclosures